

U.S. DEPARTMENT OF COMMERCE
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AD-A026 545

SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
NORTH ATLANTIC OCEAN, 31 MARCH 1976

TELEDYNE GEOTECH

PREPARED FOR
AIR FORCE TECHNICAL APPLICATIONS CENTER

MAY 1976

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SDCS-ER-76-97

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
North Atlantic Ocean, 31 March 1976

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MAY 1976

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ARPA Order No. 2897

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SDCS EVENT REPORT NO. 97

North Atlantic Ocean, 31 March 1976

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	00:05:50.2	00:00:59	59 N	033 W	4.9	N/A

Possible Association

Hagfors	00:06:06.0	00:00:00	51 N	051 W	5.4	N/A
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Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

00:01:02.1 58.4N 031.8W 5.1 4.6

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report; NORSAR short-period data is obtained from their bulletin. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at all SDCS stations were rotated.

Long-period signals were recorded at CPSO, HN-ME, RK-ON and FN-WV. The LP system at WH2YK was inoperative due to maintenance on the LP vertical channel. All LP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal LP channels at CPSO, HN-ME, RK-ON and FN-WV were rotated.

Scaling factors of plots are millimicrons at 1 Hz (not corrected for instrument response).

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT - PERIOD	LONG - PERIOD
ALPA	Alaska	65 14	00.0 N	626	None	31300
		147 44	36.0 W			
CPSO	McMinnville, Tennessee	35 35	41.4 N	574	6480 V	SL210 V
		085 34	13.5 W		7515 H	SL220 H
FN-WV	Franklin, West Virginia	38 32	58.0 N	910	KS36000	KS36000
		079 30	47.0 W			
LASA	Billings, Montana	46 41	19.0 N	744	HS10	7505A V
		106 13	20.0 W			8700C H
HN-ME	Houlton, Maine	46 09	43.0 N	213	KS36000	KS36000
		067 59	09.0 W			
NORSAR	Kjeller, Norway	60 49	25.4 N	379	HS10	7505A V
		010 49	56.5 E			8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N	366	18300	SL210 V
		093 40	20.0 W			SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N	853	18300	SL210 V
		134 58	02.0 W			SL220 H

HYPOCENTER DETERMINATION

INPUT FOR EVENT 31 MAR 76
00:00:59.0 59.001N 33.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
NAO	00 05 50.2	-0.0	-0.1	21.4	65.4
HN-ME	00 06 26.1	0.7	0.1	25.0	256.5
RK-ON	00 07 57.1	-1.1	-1.7	35.4	285.3
FN-WV	00 08 06.5	-0.8	-0.6	36.4	288.1
CPSO	00 08 53.2	0.4	1.1	41.8	260.9
LAO	00 09 14.3	0.4	0.6	44.4	288.7
WH2YK	00 09 34.6	0.4	0.6	47.0	319.1

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
NO CONVERGENCE ON CALC RUN						
00:00:26.0	58.649N	32.126W	256. CALC	0.7	16	7
00:01:02.1	58.445N	31.778W	0. REST	0.9	3	7

CALC				REST			
0	.	0		0	.	0	
1	.	0		1	.	0	
2	0.	1	0	2	0.	1	0
.
2	1.	0	0	2	1.	0	0
0	.	0		0	.	0	
0	.	0		0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.30
MAJOR 56.6KM. MINOR 20.7KM. AZ= 163 AREA= 3684 SQ.KM. REST

DATA SUMMARY

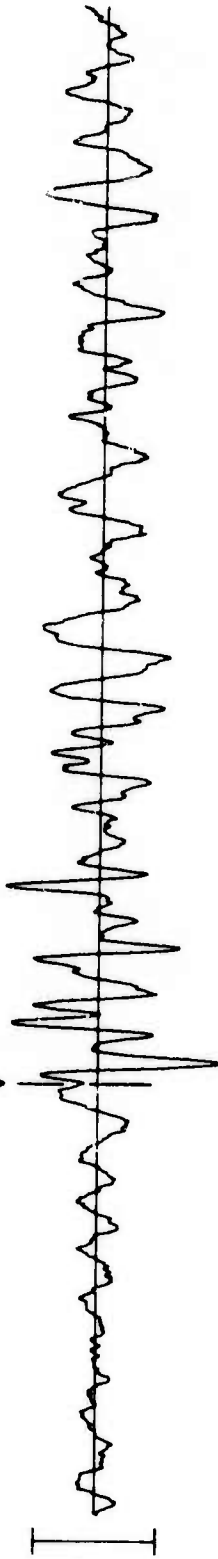
INPUT FOR EVENT 31 MAR 76
00:00:59.0 59.001N 33.000W OKM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
NAO	EP	00 05 50.2		AB	1.3	138.	4.98			21.4
HN-ME	EP	00 06 26.1		SPZ	1.1	98.	5.19			25.0
HN-ME	LQ	00 11 29.0		LPT	23.0	108.				
HN-ME	LR	00 14 37.0		LPZ	21.0	83.		4.44		25.0
RK-ON	EP	00 07 57.1		SPZ	0.7	49.	5.05			35.4
RK-ON	LQ	00 20 07.0		LPT	18.0	192.				
RK-ON	LR	00 21 16.0		LPZ	18.0	368.		5.24		35.4
FN-WV	EP	00 08 06.5		SPZ	1.5	59.	5.03			36.4
FN-WV	LQ	00 19 27.0		LPT	21.0	99.				
FN-WV	LR	00 21 15.0		LPZ	21.0	77.		4.57		36.4
CPSO	EP	00 08 53.2		SPZ	1.0	46.	4.86			41.8
CPSO	LQ	00 22 50.0		LPT	18.0	148.				
CPSO	LR	00 24 28.0		LPZ	21.0	36.		4.30		41.8
LAO	EP	00 09 14.3		SAB	99.9	9999.				
WH2YK	EP	00 09 34.6		SPZ	1.1	50.	5.30			47.0

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LP MAG	LP SDV	LP STA
00:01:02.1	58.445N	31.778W	0. REST	5.07	0.15	6	4.63	0.4	4

HN-ME 31 MAR 76

00:06:26.1



SPZ
63.17 MU



SPR
41.28 MU



SPT
37.73 MU

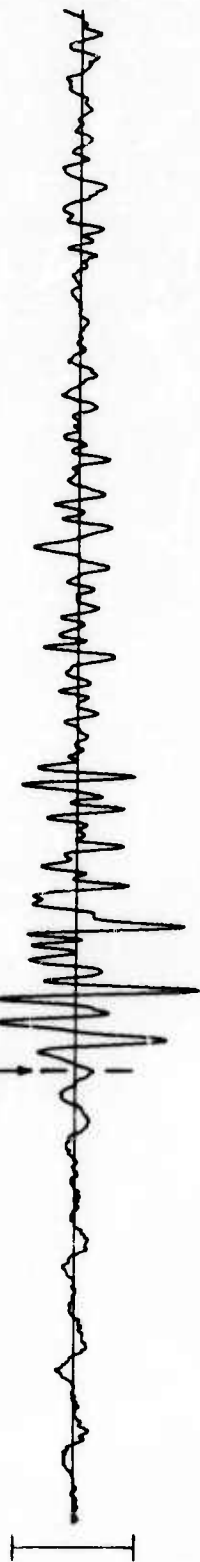
TIME



RK-ON 31 MAR 76

SPZ
46.48 MU

0007:57.1



SPR
29.17 MU



SPT
9.84 MU



TIME



FN-WV 31 MAR 76

00:08:06.5

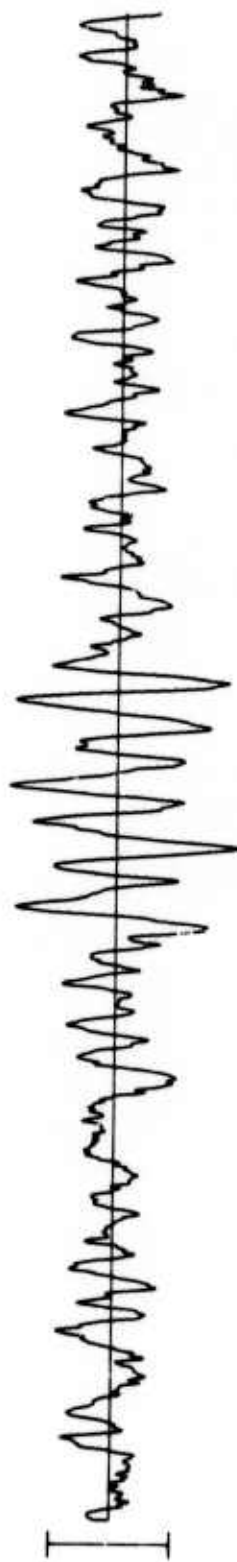
SPZ
18.68 MU



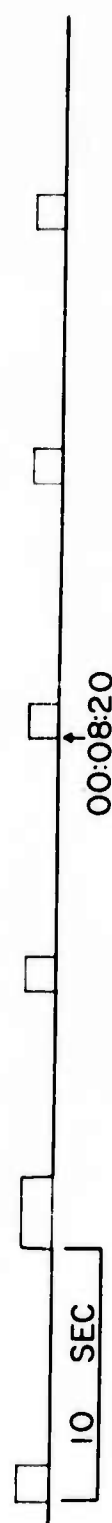
SPR
13.33 MU



SPT
11.75 MU



TIME



CPSO 31 MAR 76

SPZ
25.57 MU

00:08:53.2



SPR
9.70 MU



SPT
9.06 MU



TIME

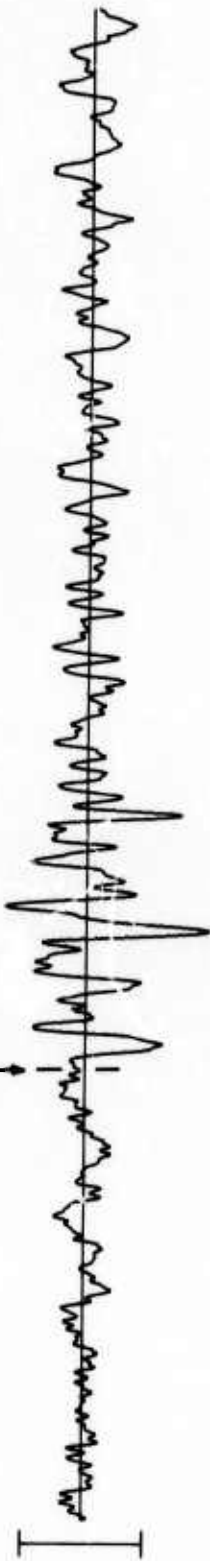


9.

WH2YK 31 MAR 76

00:09:34.6

SPZ
31.91 MU



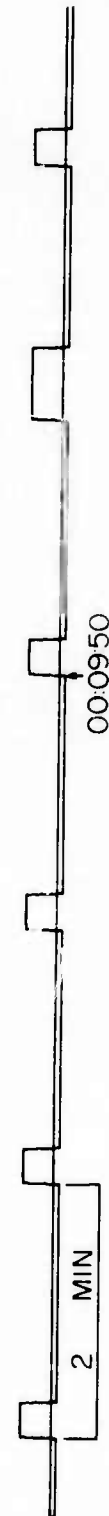
SPR
18.84 MU



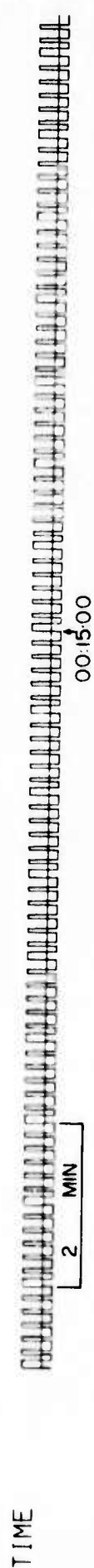
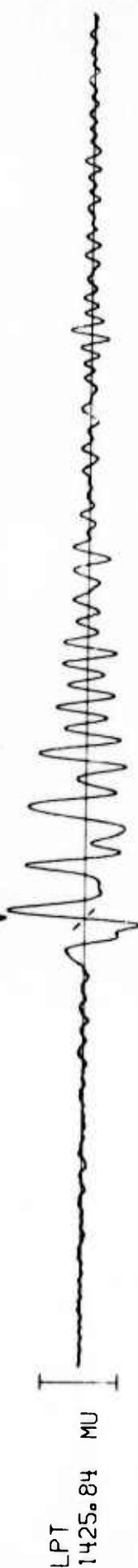
SPT
12.48 MU



TIME



HN-ME 31 MAR 76



RK-ON 31 MAR 76



FN-WV 31 MAR 76

LPZ
767.08 MU

00:21:15

LPR
571.23 MU

00:19:27

LPT
1028.32 MU

TIME

2 MIN

00:20:00

CPS0 31 MAR 76

00:24:28

LPZ
476.65 MU

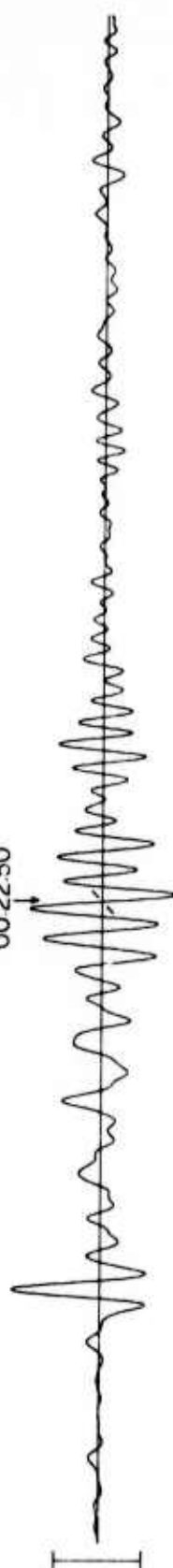


LPR
477.20 MU



00:22:50

LPT
1416.71 MU



TIME

